

CLAIMS

What is claimed is:

1. A wireless transmit/receive unit (WTRU) configured for seamless operation across various types of wireless communication systems, comprising:
 - at least one application for performing a wireless service wherein the application is configured to translate quality of service requirements across various types of wireless communication systems; and
 - at least one bearer for transmitting user-information signals between user-network interfaces.
2. The WTRU of claim 1, wherein the application is configured to receive incoming quality of service requirements specified according to one type of wireless communication system and translate the requirements to output the requirements according to another type of wireless communication system.
3. The WTRU of claim 2 further including a plurality of bearers, wherein the number of bearers corresponds to the number of wireless communication systems that the application is capable of translating.
4. The WTRU of claim 1, wherein the WTRU hands over from a first cellular type wireless communication system to a second cellular type wireless communication system and the application translates quality of service requirements of the first system to that of the second system in order to continue a service initiated in the first system.
5. The WTRU of claim 4, wherein the first cellular type wireless communication system is a UMTS system and the second cellular type wireless communication system is a CDMA 2000 system.

6. The WTRU of claim 1, wherein the WTRU hands over from a cellular type wireless communication system to a wireless local area network (WLAN) type wireless communication system and the application translates quality of service requirements of the cellular type system to that of the WLAN type system in order to continue a service initiated in the cellular system.

7. The WTRU of claim 1, wherein the WTRU hands over from a wireless local area network (WLAN) type wireless communication system to a cellular type wireless communication system and the application translates quality of service requirements of the WLAN type system to that of the cellular type system in order to continue a service initiated in the WLAN system.

8. A wireless transmit/receive unit (WTRU) configured for seamless operation across various types of wireless communication systems, comprising:

- at least one application for performing a wireless service;
- at least one bearer for transmitting user-information signals between user-network interfaces; and

- at least one translator between the application and the bearer for translating quality of service requirements whereby sessions established in a first wireless communication system may continue when the WTRU hands over to other various types of wireless communication systems.

9. The WTRU of claim 8, wherein the translator is configured to receive incoming quality of service requirements specified according to one type of wireless communication system and translate the requirements to output the requirements according to another type of wireless communication system.

10. The WTRU of claim 8, wherein incoming quality of service requirements are received and are routed to an appropriate translator and bearer to continue operation of the application while the WTRU hands over between various types of wireless communication systems.

11. The WTRU of claim 8, wherein the WTRU hands over from a first cellular type wireless communication system to a second cellular type wireless communication system and the translator translates quality of service requirements of the first system to that of the second system in order to continue a service initiated in the first system.

12. The WTRU of claim 11, wherein the translated quality of service requirements are transmitted over a bearer service corresponding to the second system.

13. The WTRU of claim 11, wherein the first cellular type wireless communication system is a UMTS system and the second cellular type wireless communication system is a CDMA 2000 system.

14. The WTRU of claim 8, wherein the WTRU hands over from a cellular type wireless communication system to a wireless local area network (WLAN) type wireless communication system and the translator translates quality of service requirements of the cellular type system to that of the WLAN type system in order to continue a service initiated in the cellular system.

15. The WTRU of claim 14, wherein the translated quality of service requirements are transmitted over a bearer service corresponding to the WLAN type system.

16. The WTRU of claim 8, wherein the WTRU hands over from a wireless local area network (WLAN) type wireless communication system to a cellular type wireless communication system and the application translates quality of service requirements of the WLAN type system to that of the cellular type system in order to continue a service initiated in the WLAN system.

17. The WTRU of claim 16, wherein the translated quality of service requirements are transmitted over a bearer service corresponding to the cellular type system.

18. A wireless communication system, comprising:
at least one interfacing device through which wireless transmit/receive units (WTRUs) may interface with the wireless communication system; and
means for receiving quality of service requirements from a WTRU requesting handover to the wireless communication system wherein the quality of service requirements are specified according to a different type of wireless communication system from which the WTRU is requesting handover from and translating the quality of service requirements to continue a service initiated in the system from which the WTRU is requesting handover from.

19. The wireless communication system of claim 18, wherein the wireless communication system is a cellular type wireless communication system and the translation of quality of service requirements is performed in the core network.

20. The wireless communication system of claim 18, wherein the wireless communication system is a wireless local area network (WLAN) type wireless communication system and the translation of quality of service requirements is performed at an access point.

21. The wireless communication system of claim 20, wherein the translation of quality of service requirements is performed at an access router.

22. A method for providing seamless handover between various types of wireless communication systems, comprising the steps of:

initiating an application in a wireless transmit/receive unit (WTRU) in a first type of wireless communication system;

requesting handover of the WTRU from the first system to a second type of wireless communication system;

translating quality of service requirements from the specifications of the first system to the specifications of the second system;

handing over the WTRU to the second system; and

continuing in the second system the application that was initiated in the first system, wherein the application is continued with the quality of service requirements specified according to the specifications of the second system.

23. The method of claim 22, wherein the application is continued in the second system using a bearer that corresponds to the second system.